

Application No.: 09/922,092

Docket No.: JCLA6561

REMARKS**Present Status of the Application**

The Office Action rejected claims 1-8. Specifically, the Office Action rejected claims 1, 2, 5, and 6 under 35 U. S. C. 102(e) as being anticipated by Christiansen et al. (U. S. Patent 5,983,302; hereinafter Christiansen). In addition, the Office Action rejected claims 3, 4, and 7 as being unpatentable over Christiansen in view of Bennett (U. S. Patent 6,679,904). The Office Action also rejected claim 8 under 35 U.S.C. 103(a) as being unpatentable over Christian in view of Bennett and further in view of Rossum (U. S. Patent 6,622,207). Claims 1-8 remain pending in the present application, and reconsideration of those claims is respectfully requested.

Discussion of Claim Rejections under 35 USC 102

The Office Action rejected claims 1, 2, 5, and 6 under 35 U. S. C. 102(e) as being anticipated by Christiansen. Applicant respectfully traverses the rejections for at least the reasons set forth below.

1. With respect to claim 1, the present invention is directed to a method of bus priority arbitration driven by data used in a bus system. The bus system comprises a bus and a plurality of masters connected to the bus. Each master can output a request for a grant to use the bus. In order to have better efficiency, the present invention responds to the request of each master according to a predefined orderly rotation. Then, the response to the requests of the masters stops according to the predefined orderly rotation when a data for one of the masters is ready.

More specifically, the master, which is ready in preparing data and wait for the grant to use

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the bus, is attributed a highest priority to access the bus. *Christiansen clearly requires an equal priority, which is not the specific order of priority as claimed in the present invention. In other words, the present invention does not treat the matters by equal priority.*

2. In "Response to Arguments" of the FINAL Office Action, the Office Action has referred to Christiansen at lines 47-56 of column 5 and lines 39-49 of column 8. However, all of these disclosures of Christiansen are to get the equal priority.

Lines 47 – 56 of column 5 in Christiansen discloses:

In order to ensure that all of the bus master devices of first lower priority have an equal opportunity to use the bus, the arbiter uses an equal access arbitration scheme. For example, a round robin arbitration scheme which awards system bus control to each of any user-specified bus master devices of first priority in a fixed, sequential order, can be used as an equal access arbitration scheme. Alternately, any arbitration scheme which ensures equal access among the bus master devices, such as token ring protocol, can be used as well. (Emphasis added)

However, the round robin arbitration is used as an *equal arbitration scheme*. The sequential order does not specifically a specific order in rotation. Christiansen never discloses the claimed features.

Further, lines 39-49 of column 8 in Christiansen discloses:

Further those skilled in the art will appreciate that the computer system of FIG 3 can be configured such that the bus master device of second priority executes both time-critical (for example, real time) signal processing operations and non-real time operations. In the case of

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non-real time operations, the bus master device of second priority can request access to the system bus using its request line, and can be awarded system bus control via the equal access arbitration scheme. However, in the case of real time operations, system bus control can be acquired via use of the arbitration critical line. (Emphasis added)

As one can see, the equal access arbitration scheme is clearly desired in Christiansen, who does not disclose the specific access order in rotation.

Therefore, Christiansen does not disclose the equal features as defined in independent claim 1.

3. With respect to dependent claims 2, 5 and 6, for at least the same foregoing reasons, claims 2, 5 and 6 are not disclosed by Christiansen.

Discussion of Claim Rejections under 35 USC 103

The Office Action rejected claims 3, 4, and 7 as being unpatentable over Christiansen in view of Bennett. The Office Action rejected claim 8 under 35 U.S.C. 103(a) as being unpatentable over Christian in view of Bennett and further in view of Rossum. Applicant respectfully traverses the rejections for at least the reasons set forth below.

4. With respect to independent claims 3 and 4, for at least the same foregoing reasons applied to independent claim 1, claims 3 and 4 are not disclosed even if Bennett is in combination. Bennett discloses the round robin bus arbitrator, which is operated under the equal priority (see col. 5, lines 50-51 in Christiansen).

5. With respect to independent claim 7, for at least the same foregoing reasons applied to independent claim 1, independent claim 1 is not disclosed even if Bennett is in combination.

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Bennett discloses the round robin bur arbitrator, which is operated under the equal priority (see col. 5, lines 50-51 in Christiansen).

6. With respect to dependent claim 8, Rossum is further cited in combination with Christiansen and Bennett. However, Rossum does not supply the missing features in Christiansen and Bennett. For at least the same foregoing reasons applied to independent claim 7, features recited in dependent claim 8 is not disclosed by the prior art references.

For at least the foregoing reasons, Applicant respectfully submits that independent claims 1 and 7 patently define over the prior art references, and should be allowed. For at least the same reasons, dependent claims 2-6 and 8 patently define over the prior art references as well.

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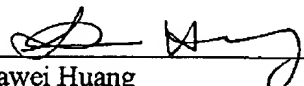
CONCLUSION

For at least the foregoing reasons, it is believed that all the pending claims 1-8 of the invention patently define over the prior art and are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

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Respectfully submitted,
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